



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,293	11/19/2003	Bruce W. Ramme	960049.90324	7543

26710 7590 06/08/2005

QUARLES & BRADY LLP
411 E. WISCONSIN AVENUE
SUITE 2040
MILWAUKEE, WI 53202-4497

EXAMINER

MARCANTONI, PAUL D

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,293

Applicant(s)

RAMME ET AL.

Examiner

Paul Marcantoni

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-11,13-18 and 20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3,5-11,13-18, and 20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Art Unit: 1755

Applicant's arguments filed 4/6/05 have been fully considered but they are not persuasive. The applicants' amendment of claims necessitated the new grounds of rejection below:

New Matter:

Claims 1,3,5-11,13-18, and 20 are rejected under 35 USC 112 first paragraph and 35 USC 132 as the specification as originally filed does not provide support for the invention as is now claimed.

The terms "depositing the amount of particulate matter on a conveyor *floor* would appear to be new matter because there is no literal support for the term floor. It is believed applicants have support for a fluidized bed conveyor (21) from page 14, lines 19-21 of their specification. Again, there is no support for the term floor.

35 USC 103:

Claims 1,3,5-11,13-18, and 20 remain rejected under 35 U.S.C. 103(a) as obvious over Srinivasachar et al. '447 or 120, Matsuyama et al. 663, Siddle '851 B1, Edlund et al. '567 B1, *Zemskov et al.*, EP 380467 (*Fercher et al.*), *Fujita (JP 04061981)*, *Hamaguchi et al. (JP 07155722 or JP 07155723)*, *Hoermeyer et al. (DE 19801321)*, *Okada (JP 2003154233)*, or *Cochran et al. (RD 470003)*.

Note : Italicized references are one page abstracts only.

All of the above cited references teach heating a sorbent which can be a solid material such as fly ash, activated carbon, soil, etc. to liberate mercury from these solid particulates thus anticipating the instant invention. Even if not anticipated, overlapping

Art Unit: 1755

ranges of temperature would have been prima facie obvious to one of ordinary skill in the art and would have expected to obtain the same result of mercury removal (see abstract and claims for each reference teaching heating to remove mercury).

The applicants also present a particular method how they heat or pass heat through openings to remove mercury. It is the examiner's position that technique of heating would have been an obvious design choice for one of ordinary skill in the art as long as a critical temperature is achieved that leads to the removal/liberation of mercury from the solid particulate matter.

Response:

The applicants argue that as a result of their amendment of placing the particulate matter containing mercury on a conveyor wherein it is heated, it is allegedly patentably distinct over the prior art. The applicants further argue that the material may be heat treated to remove the mercury and conveyed at the same time (ie simultaneously). In rebuttal, the applicants do not dispute that it is old in the art to treat sorbent or material containing affixed mercury in a heating range overlapping the instant invention. They are silent on this point. They only argue that their material is heated and conveyed versus the prior art which is alleged to be batch or stationary heating of the mercury contaminated sorbent. In other words, applicants' process is allegedly patentably distinct over the prior art because it is a continuous process. In rebuttal, the applicants does not state in their own specification that the process of the invention must be continuous but only that the method "may" be a continuous process wherein the temperature of the sorbent is exposed to heated air to remove the mercury.

Art Unit: 1755

Applicants thus leave open the possibility by using "may" for a batch or stationary (non-continuous) process wherein no conveyance occurs but only direct heating of the mercury contaminated sorbent.

Also, it is the examiner's position that it would have been an obvious design choice for the applicants to utilize either a continuous process involving both heating and conveying the mercury contaminated sorbent wherein the mercury is removed or a batch process. First, It is well within the expected skill of the technician of ordinary skill in the art to operate a process continuously. See *In re Dilnot* 796 OG 591, 1963 CD 745 (p.752); *In re Lincoln*, 1942 CD 386; *Dow v Coe*, 1942 CD 128; *In re Korpi et al.*, 1947 CD 290 73 USPQ 229). Second, it is also within the level of ordinary engineering skill in the art to convert a process from a continuous process to a batch process and vice versa. *In re Dilnot* 138 USPQ 248 (CCPA 1963).

For the foregoing reasons, the finality of this office action is now proper. The applicants' amendment necessitated the new grounds of rejection.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1755

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni
Primary Examiner
Art Unit 1755